

STATE OF CONNECTICUT  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



RCRA RECORDS CENTER  
FACILITY MACDERMID  
I.D. NO. CTD001164599  
FILE LOC. R-1C  
OTHER RDMS# 100870

7/92 Rev.

RCRA (HAZARDOUS WASTE) INSPECTION REPORT  
TREATMENT/STORAGE/DISPOSAL FACILITY



RDMS DocID 00100870

Name(s) of inspector(s): Hassler  
Date(s) of inspection: 2/9, 10, 17 + 22/93 Complaint Number:         
Previous RCRA inspection date: 4/92 Active RCRA enforcement #: Stipulated Judgement  
CV91-5010495  
entered 4/2/93

SITE INFORMATION

EPA ID No.: CTD 001164599  
Site Name (& AKA/DBA if any): Macdermid, Inc.  
Street Address: 526 Huntington Ave., Waterbury 06708  
Mailing Address: Note: C. Gillis' office: 245 Freight St.  
Contact Name(s) and Title: Cherrie Gillis, mgr. reg. affairs; Bill Schureikhen, eng.  
Contact Phone No.: 575-5700 mgr.

STATUS (actual - operating)

<input type="checkbox"/> CESQG	<input checked="" type="checkbox"/> Storage	<input checked="" type="checkbox"/> Interim Status	<input checked="" type="checkbox"/> Recycle/Reclaim
<input type="checkbox"/> SQG (100-1000kg/mo)	<input type="checkbox"/> Treatment	<input type="checkbox"/> Permitted facility	<input type="checkbox"/> Unknown
<input checked="" type="checkbox"/> Lg Quantity Generator	<input type="checkbox"/> Disposal	<input checked="" type="checkbox"/> CT Regulated facility	<input type="checkbox"/> Other:
<input checked="" type="checkbox"/> Transporter	<input type="checkbox"/> Post closure units	<input checked="" type="checkbox"/> Commercial facility	
<input type="checkbox"/> Burner/Blender		<input checked="" type="checkbox"/> Receiving waste from off-site	

Notified as: Generator, Transporter, Storage + Recycle Facility (including Ct.-reg. facility)  
Any discrepancies between notification/Part A/B & actual operation:  
Yes ☒ No ☐ (describe): Wish to keep recycling of NMP, solder conditioners + electroless Cu on  
If yes, has a status change been requested: Yes ☐ No ☐ Part B/Ct.-facility permit despite  
Comments (e.g., type of change requested): not actually performing these activities.  
Most recent Part B revision 2/17/92 (HRP)

TYPE OF WASTE HANDLED

<input checked="" type="checkbox"/> Ignitables (D001)	<input checked="" type="checkbox"/> F or K listed wastes	<input checked="" type="checkbox"/> Used oil (regulated under 266)
<input checked="" type="checkbox"/> Corrosives (D002)	<input checked="" type="checkbox"/> P or U listed wastes	<input checked="" type="checkbox"/> CT regulated wastes
<input type="checkbox"/> Reactives (D003)	<input checked="" type="checkbox"/> Precious metals	<input type="checkbox"/> Unknown
<input checked="" type="checkbox"/> TCLP (D004-43)	<input type="checkbox"/> Haz. scrap metal	<input type="checkbox"/> Other: <u>      </u>

HANDLING METHOD (actual)

☒ Containers (# ± 725)      ☐ Waste piles (# \_\_\_\_\_)  
☒ Tanks-above ground (# 3+back up.)      ☒ Wastewater treatment  
☐ Tanks-underground (# \_\_\_\_\_)      ☐ Incinerator/Thermal treatment  
☐ Surface impoundments (# \_\_\_\_\_)      ☐ Chem/Phys/Bio treatment  
☐ Landfill  
☐ Other: Several haz. waste recycle process tanks.

SITE DESCRIPTION

Proximity to residential areas/surface water/recharge zone, etc: Steele Brook adjacent, feeds Naugatuck River < 300 meters from plant; area also commercial + industrial.

Water supply (if wells, give approximate location): City

Types of waste/water discharges: San. sewn for treated industrial effluent (one pt. source), plus NPDES to Steele Brook (non-contact cooling H<sub>2</sub>O, two pt. sources).

Evidence of on-site disposal: Yes ☒ No ☐. If yes, identify location, amount & frequency, length of time, disposal sites used, etc: Three pre-RCRA MOH surface impoundments + waste pile, excavated but not RCRA closed, claim exempt as pre-RCRA - see pg. 20 for details. Some waste buried in place.

Groundwater monitoring wells on-site: Yes ☒ No ☐.  
If yes: ☐ RCRA (complete GWM checklist) ☒ Non-RCRA (briefly describe why installed and any information available): See pg. 20 + attachment, total 6 active wells in place around former MOH impoundments + waste pile

GW classification (if known): GB Property ☒ owned ☐ leased: \_\_\_\_\_

Previous occupants of site: N/A

Comments: \_\_\_\_\_

SITE ACTIVITYDate established at present location: ≈ 1930No. employees/shifts ≈ 50/three Type of activity: Mfg. metal finishing chemicals, plus reclaimProducts: etchants, cleaners, electroplating chems, strippers. spent chemicals

Describe processes (particularly those involving chemicals): \_\_\_\_\_

I. Liquids Mixing/Blending: > 500 chemical formulations blended, primarily for printed circuit board mfg., including acid + alkaline cleaners, palladium chloride activators, CuSO<sub>4</sub> cholorates, NaOH, formaldehyde reducers, ammonium bifluoride solder strippers; utilize 66 mixers sized 10 - 7000 gal. no reactors; also ≈ 12 bulk storage tanks, above-g., sized 2000 - 10,000 gal. (store HCl, H<sub>2</sub>SO<sub>4</sub>, nitric + phosphoric acids, NaOH, EDTA, hydrogen peroxide, KOH, others).

Mixers charged via drums, bags + direct from bulk tanks; after mixing get Q.C. checked, filtered via polypropylene bag filters, and packaged into 5-55 gal. containers and 350 gal. totes. Also small vol. pilot work.

Wet scrubbers utilize acid and/or alkaline solutions for emission control, monitored via pH and ORP meters, with continuous H<sub>2</sub>O feed into scrubbers and continuous bleed off to w.w.t.s.

II. Inks/Graphic Arts Blending: mfg. inks used as maskants, p.c. boards + related uses; ≈ 8-10 blenders (largest 400 gal.) using epoxy resins, acrylates, solvents (Cellosolv acetates, butyl carbitol, dipropylene glycol ether), dyes and small vol. pigments; three roller mills, then package + ship. Note: some resins pre-heated prior to use, and sometimes use powdered silica as thickener.

Also package (no mfg.) amine catalysts, sometimes dissolve in solvents.

Cleaning of blenders: using same solvents noted above, clean small vessels ≈ once or twice/week, large vessels ≈ once or twice/year (due to dedicated use).

Also small lab, sinks to w.w.t.s.

III. Electroless Ni Mfg.: room self-contained, no floor drains; blend ≈ 3000 gal./week products (primary products: Ni sulfate, Na hypophosphite, aqua ammonia); ingredients include ammonia, Ni acetate, Ni sulfate, Na hypophosphite, malic acid, Pb acetate, Comments (e.g., any changes since last inspection): smaller vol. organics. Utilize six blend tanks (largest 1200 gal.) plus couple 100 gal. portable transfer tanks; filter + package.

Wash out blenders, lines + pumps ≈ daily with D.I. water, use max. ≈ 300 gal. per wash out: if wash water free of Ni then treat in w.w.t.s., if contains Ni then

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PROCESSES (cont.)

collect in evaporation unit ( $\approx 450$  gal. reservoir), dried concentrate off unit to drums, with air emission off unit direct to atmosphere.

IV. Reclaim Operations: receive wastes (haz. + non-haz.) from customers for a) on-site reclamation, or b) transshipment to other reclaimers. Receive only materials refg. by MacDermid. Two wastes treated on-site: Cu etchant and solder stripper. Two wastes transshipped: solder conditioner and electrolytic Cu. One waste stream, NMP, was reclaimed or transshipped until  $\approx 2$  yrs. ago, no longer receive from off-site, distillation unit + tanks still in place, empty + unused, do not intend to formally close out yet.

A. Cu etchant: received in tank trailers, totes or drums, off-loaded into any of three 7000 gal. haz. waste holding tanks, above-g. indoors, plus 4th tank (5000 gal. above-g. indoors) as back-up which normally contains NaOH, claim never yet held haz. waste but keeps on Part B as back-up waste tank in case needed.

Spent etchant transferred into 3500 gal. or 5000 gal. "cooker" tanks where add NaOH plus heat; reaction liberates ammonia (vented to scrub tank) and precipitates  $\text{CuO}_2$ ; in scrub tank ammonia gets reacted with  $\text{HCl} + \text{H}_2\text{O}$  to form rough product; solution cooled and adjusted with additional chemicals (ammonia, carbonates, stabilizers, smaller vol. phosphoric acid + sulfur-bearing proprietary chemical that is a carcinogen) to form finished product.

"Cooking" operation takes  $\approx 12$  hrs.; using eight scrub tanks (six 3300 gal., two 4000 gal.) for end-line filtration.

Precipitated  $\text{CuO}_2$  is in alkaline mother liquor, transferred to 5000 gal. tank where pH adjust using  $\text{H}_2\text{SO}_4$ , then discharge liq. to wwt's;  $\text{CuO}_2$  slurry flushed  $\approx$  twice/day with  $\text{H}_2\text{O}$  from bottom of cooker or 5000 gal. tank, goes directly to dedicated filter press. Approx. 15% of recovered  $\text{CuO}_2$  used to formulate  $\text{CuCl}_2$  or  $\text{CuSO}_4$  products; these products get filtered through activated carbon to remove trace organics; remaining  $\text{CuO}_2$  gets sold to C.P. Chemicals, N.J. who use it as wood preservative plus sell it to pesticide industry.

B. Solder stripper: last performed  $\approx 11/92$  due to technical problem:  $\approx 2000$  gal. of unstable product in 3000 gal. tank (conical shaped), is ammonium bifluoride without having added peroxide (due to stability problem); exact ship this batch off-site as waste, then clean tank + reinstitute process; note: also shipped off 5 dr. of same as haz. waste. In addition, drums of stable solder strippers still being received from off-site, store until process goes back on-line, though claim incoming vol. reduced due to re-formulation of solder stripper. Process as follows:

Stripper consists of ammonium bifluoride + hydrogen peroxide ( $\text{H}_2\text{O}_2$ ); when spent the  $\text{H}_2\text{O}_2$  has been consumed, precipitating Pb fluoride. Reclamation consists of transferring solution (cont. pg. 3b)

(CONTINUED FROM PAGE 3a)EPA ID number: CTD 001164599 Date of inspection: 2/9, 10, 17 + 22/93Site name: MacDermid, Inc. Town: WaterburyPROCESSES (cont.):

to 3000 gal. conical tank for settling Pb Fluoride, then decant liq. to 1500 gal. electrolysis cells (2) which plate out Cu; next solution transferred to tank for precipitating remnant Cu (with dithiocarbamate), then filtered via filter press; this filtered solution becomes make-up bath to which add  $H_2O_2$  and ammonium bifluoride, creating final product.

Note: settled Pb Fluoride from conical tank gets drummed for off-site haz. waste disposal.

- See Waste Profile for vols. above-noted wastes handled plus transshipped wastes.

Discontinued treatment/reclamation of spent N-methyl-2-pyrrolidone (NMP)  $\approx$  2 yrs. ago; formerly distilled NMP on-site, then transshipped for reclaim off-site. Still, tank + related equip. still on-site, empty, intend to retain on Part B permit.

Also discontinued distillation of dioxane  $\approx$  4 yrs. ago; had received fr/customers, distilled to concentrate, then disposed of off-site.

V. Pilot Plant: perform solder stripper recovery work-up, plus mfg. small vol. brighteners and other chemicals; utilize  $\approx$  5 blenders, largest  $\leq$  300 gal.; blend brighteners for Ni + Zn plating baths, utilize I.P.A. + other organics; also blend catalyst for black paint (using collosolve acetate, isocyanates); package into 5 gal. containers.

Cleaning: hand-wipe using acetone + ketones; also  $H_2O$  wash blenders + other vessels, to sump to w.w.t.s.

VI. Laboratories: total three labs on-site, 1) Q.C. lab for ink dept., 2) wet chemistry lab for Q.C. of liq. products and raw materials, plus fingerprint tests on recyclables, 3) R+D lab to be consolidated with wet chem. lab, currently unused (formerly R+D by Don Becking), most chemicals disposed of (had major lab packing project 1992); currently R+D is being performed at Freight St. plant.

All lab sinks reportedly go to w.w.t.s.

VII. Wastewater Treatment System (w.w.t.s.): all batch treatment; plant wastewaters collect in 12,000 gal. equalization sump, pumped to one of four 15,000 gal. batch treat. tanks; treatment includes fluoride precipitation (via addition of phosphoric acid +  $CaCl_2$ ), Cr reduction (using Na metabisulfite), metals precipitation (using Na hydrosulfide); next ultrafiltration system recirculates wastewater through 3000 gal. tank which concentrates solids, pumped to separate 3000 gal. tank feeding filter press; MOH to roll-off dumpster; treated effluent off ultrafiltration discharged to sanitary sewer.

Note: the four 15,000 gal. tanks are renovated former 60,000 gal. tank, all concrete with liners, open vault partially in-g. Additional four 15,000 gal. constructed but not yet on line. Permitted max. 60,000 gpd, avg.  $\approx$  40,000 gpd.

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VIII. Dry Blending operation in former Plating Lab: mfg. defoamer; blend silicone, methylene chloride (used as carrier spraying borax onto silicone), after borax sprayed onto silicone goes into ribbon blender; product is dry.

Dust collector vents ribbon blender + borax overspray.

IX. Maintenance Dept: small vol. machining (bench-work); plumbing; welding; wood shop; no parts cleaning nor degreasing. Small vol. painting on limited basis.

X. Miscellaneous:

- sample storage: product samples retained for all production runs, held for one year then disposed via w.w.t.s. or off-site shipment.

- washing machines for uniform cleaning, wastewater either to san. sewer or w.w.t.s.

- parcel packing dept.: small chemical containers (for product testing by customers) packaged + shipped via mail, UPS, etc.

- variety of wet scrubbers used throughout plant for air emissions (e.g. pilot plant, etchant line, lig. platforms, w.w.t.s., activation/catalyst lines, other depts.); use acid + alkaline solutions, monitored via pH meters + ORP, spent solutions to w.w.t.s. Note: two new scrubbers added to lig. blend dept.

- eliminated dry mixing dept. (three mixers, using chromic acid salts, NaOH + inorganic acid salts)  $\approx$  2 yrs. ago; four silos empty + unused (formerly held soda ash, NaOH, Na metasilicate); however still use one mixer (max. 1000 lb size) few days/month mixing chromic acid salts, fluoride + wetting agents, package + ship.

Dept's floor drains go to w.w.t.s.

Also store 5 gal. containers of part-shelf-life products, marked with product codes (see Waste Containers).

- eliminated metal finishing lab, use this area to store rejected raw materials for return to suppliers; currently 5 dr. corrosives and  $\approx$  12 five-gal. containers.

- room set aside for breaking down product packaging into smaller sales samples.

Note: all site tanks above-g. except partially recessed w.w.t.s. tanks and 10,000 gal. #2 fuel oil tank (in-g.), 4000 gal. #2 fuel oil tank.

Also MacDermid uses extensive volume deionized H<sub>2</sub>O, backflush D.I. units with NaOH and/or acids (HCl + H<sub>2</sub>SO<sub>4</sub>), discharged to w.w.t.s. ( $\approx$  15,000 gal/month).

Also still occasionally repackage CN solutions for shipment, plus few blends use CN ingredients.

WASTE PROFILE

WASTE STREAM	EPA WASTE #	EST. GENERATION RATE (amount:time)	HANDLING METHOD	TRANS	TSD
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Wastes Received From Off-site 1992:A.) From Customers:

- 1) 0002/0004/0008 Cu etchant; 1241,074 gal/'92 for on-site reclamation.
- 2) 0001/0002/0008 Solder stripper; 29,718 gal/'92 " " " "
- 3) 0002/0008 Solder conditioner; 13,188 gal/'92 stored for trans-shipment to Macdermid Inc., Ferndale, MI. for reclamation.
- 4) CR04 electroless Cu solution; 38,119 gal/'92 for trans-shipment to disposal facilities.

B.) From Macdermid Inc., Freight St., Waterbury:

- 1) CR04 electroless Cu solution; 3410 gal/'92 " " " " " "
- 2) non-haz. lab packs (talc, resins, epoxy); ~38,691 lbs/'92 " " " "
- 3) unspecified small vol. Ni waste for trans-shipment to disposal facility.

Comments: No longer received from customers electroless Ni nor NMP wastes in 1992.

C.) From Macdermid Inc., Canada:

- 1) In 12/92 reinstituted receiving ~160 dr/wk spent Cu etchant for reclaim.

(cont. pg. 4a)

RCRA (the statute)

WASTE MINIMIZATION PROGRAM (GOR)

Is a program in place (If yes, generally describe components of program, wastes addressed, reductions achieved): Inventory control program resulted in less stockpiled chemical inventory, consume raw matls. w/ fewer shelf-life problems; solder stripper reformulated so less vol. taken back in fr. customers for recovery; also improved ammonia handling and emission control.

40 CFR 262.11<sup>1</sup>HAZARDOUS WASTE DETERMINATIONS (GHW)22a-449(c)-102(a)<sup>2</sup>

Determination conducted for all waste streams: Yes X No \_\_\_ (explain): One dr. older glass heads + liq. suspected to contain Cd (from obsolete process machine) found by 3/9/93 to be non-haz., documented (see file); 8 dr. Ni solution under analysis, by completion of inspection were confirmed non-haz.; one dr. waste oil conservatively marked "haz. waste" but actually non-haz. (internal code #362, vacuum pump oil).

<sup>1</sup> See 40 CFR 264 for permitted facilities.<sup>2</sup> See 22a-449(c)-104 for permitted facilities.

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WASTE PROFILE (cont.):Outgoing Shipments 1992:

- 1) F006 Mott liq.; 13,795 gal/'92 to EWR, Waterbury.
- 2) F006 Mott sludge; 200 yds<sup>3</sup>/'92 to WRC, PA. via Sealair vehicles
- 3) D002/D008 HCl acid; 176,925 gal/'92 to MacDermid Inc., Fennell, MI.
- 4) D007 wastewater; 114,574 gal/'92 to Freshold Cartage, N.J. and to E.I. DuPont, N.J.  
These include MacDermid-generated wastes and trans-shipped wastes generated by customers of MacDermid.
- 5) D007 solids (process tanks contain. w/Co + methylene dianiline); 4 tons (one shipment) to EWR.
- 6) D002/D006 liq. N.O.S. (Ni sulfate, hydroxy acetic acid, Cd, Na hypophosphite, Pb); 2680 gal/'92 to Cycle Chem., N.J.
- 7) D001 inks; 770 gal/'92 to Laidlaw Env. Services, MA.
- 8) D002 liq. (HCl, H<sub>2</sub>SO<sub>4</sub>, cupric chloride); 2090 gal/'92 to Laidlaw Env. Services, MA.
- 9) D002 liq. (H<sub>2</sub>SO<sub>4</sub>/CuSO<sub>4</sub>); 7000 gal/'92 to Michigan Disposal.
- 10) D002 liq. (HCl); 300 gal. to United Refining + Smelting Co., Illinois
- 11) D002 solids (ethanolamine, phosphoric acid, NaOH, H<sub>2</sub>SO<sub>4</sub>, Fluoboric acid); 5835 lbs/'92 to Laidlaw Env. Services, MA. Add 250 lbs chlorosulfonic acid to Laidlaw.
- 12) D002 NaOH + resist strip solutions; 665 gal/'92 to Laidlaw, MA.
- 13) D002/D001 solids (alcohol, permanganates); 1360 gal. to Laidlaw, MA.
- 14) D007/D001 chromic acid solids; 1104 lbs/'92 to Laidlaw, MA.
- 15) D007 chromic acid solution; 165 gal/'92 " " "
- 16) D006/D008 liq.; 935 gal/'92 " " " "
- 17) D008 solids (Pb Fluoride); 1450 lbs/'92 " " "
- 18) D008 liq. (Pb Fluoride); 165 gal/'92 " " "
- 19) D008/D002 (boric acid/Pb fluoroborate); 220 gal/'92 " "
- 20) D001 collasolve; 330 gal/'92 to Laidlaw Env, MA.
- 21) D001/D035/U159 MEK solution; 100 gal/'92 to Laidlaw Env, MA.
- 22) U122 formaldehyde; 110 gal/'92 " " " "
- 23) D001/F003 acetone; 55 gal/'92 " " " "

Several waste streams denoted as pounds, majority are lab packs of mixed liq + solids, many streams combined here for brevity; volumes are approximations:

- 1) F001 U11 trichloroethane; 675 lbs/'92 to Laidlaw Env. Services, MA.
- 2) D001 (alcohol, styrene monomer, formaldehyde traces, toluene, others); 2795 lbs/'92 to Laidlaw.
- 3) U219 poisonous solid; 400 lbs/'92 to Laidlaw Env. Services, MA.
- 4) D001/D002/D007 Cd, Ba, ammonia debris; 1715 lbs/'92 " "
- 5) U122/D024/U353 formaldehyde, cresols; 1580 lbs/'92 " "

(cont. pg. 4b)

(CONTINUED FROM PAGE 4a)EPA ID number: CTD 001164599 Date of inspection: 2/9,10,17+22/93Site name: Macdermid Inc. Town: WaterburyWASTE PROFILE (cont.):

- 6) D001/F003/F005/D035/U133 toluene, acetates, acrylates; 1100 lbs/'92 to Laidlaw, MA.
- 7) U170 nitrophenols; 1200 lbs/'92 to Laidlaw Env. Services, MA.
- 8) D002/D001 oxidizers; 400 lbs/'92 " " " " "
- 9) D006/D011/P029/P030; CN contents; 100 lbs/'92 to Laidlaw, MA.
- 10) D001/D018/D035/D038/P102/U019 (various lab packs; nitroaniline, benzene, pyridine, etc.); 440 lbs/'92 to Laidlaw Env. MA
- 11) D001/U223 (toluene diisocyanate); 100 lbs/'92 to Laidlaw Env. Serv, MA.
- 12) D001/D002/F002/F003/U213 (mixed lab packs); 1000 lbs/'92 " "

Misc. other smaller vol. lab packs also shipped, small vols. also to Enscq, Arkansas via Price Trucking, N.Y.

Non-haz. wastes shipped off 1992:

- 1) waste Cu sulfate solution; 39,279 gal/'92 to Freshhold Cartage, N.J. and to E.I. DuPont, N.J.
- 2) waste corrosive solids;  $\approx$  3980 lbs/'92 to Laidlaw Env. Serv, MA.
- 3) crushed cans + debris;  $\geq$  45 drums/'92 " " " "
- 4) waste surfactants + cleaners;  $\approx$  10,800 lbs/'92 " " " "
- 5) waste glycols, resins, phthalates, oils, epoxy (some titanium, potassium, Na fluoroborate);  $\approx$  7390 lbs + 10 dr. liq. for 1992, to Laidlaw Env. Serv, MA.
- 6) Ni sulfate, urea, Ni solution, cleaners; 2300 lbs/'92 + 440 gal/'92 to Laidlaw.
- 7) ammonium silicofluoride; 12 dr/'92 to Laidlaw Env, MA.
- 8) dyes, pentachloroethane, diacetone; 6 dr/'92 + 1400 lbs/'92 to Laidlaw, MA.
- 9) stannous chloride, bisulfate, NaOH solids; 1450 lbs/'92 " " " "

Miscellaneous other non-haz. wastes (including lab packs) for 1992 total 7510 lbs/'92 (numerous materials, oddballs, clean-outs, etc.) plus  $\approx$  60 dr. some.

Dates/months of manifests reviewed: Spot checked 1992Manifests used for all hazardous waste shipments: Yes ☒ No ☐ (explain): \_\_\_\_\_Appropriate copy(ies) on-site: Yes ☒ No ☐ (explain): \_\_\_\_\_Any exception (generators); discrepancy or unmanifested waste reports (facilities): Yes ☒ No ☐  
(explain): Yes, exception reports and discrepancy reports (various) on file, claim occurs 2-3 times/yr.Comments (e.g., CT reg. wastes): Few minor omissions noted: missing phone #, no description of N.O.S. wastes on few.

(See special checklist for land ban manifest requirements)

40 CFR 265.75 ANNUAL HAZARDOUS WASTE REPORT (DOR)

22a-449(c)-105(a)(2)(D)

Reports filed on an annual basis: Yes ☒ No ☐: \_\_\_\_\_

Comments: \_\_\_\_\_

40 CFR 262.50-58 EXPORT/IMPORT ACTIVITIES (DEX)

22a-449(c)-102(a)(1)

40 CFR 262.20 &amp; 265.12

22a-449(c)-105(a)(1)

Has any hazardous waste been exported/imported during the last 3 years: Yes ☒ No ☐

(If No, skip the rest of this section).

## Exports:

Do they attach a current Acknowledgement of Consent form for each export shipment:

Yes ☒ No ☐ (explain): \_\_\_\_\_No longer intend to export, last done 1991 (noted below)Have they filed with EPA's administrator by March 1 of each year an annual report summarizing the previous year's export activities: Yes ☒ No ☐: \_\_\_\_\_In the past 3 years, have they ever had waste returned to the U.S., & if so, have appropriate exception reports been filed: Yes ☐ (explain) No ☒ \_\_\_\_\_Have manifests for export shipments been completed according to the special manifest requirements (e.g., additional language): Yes ☐ No ☐ (explain): Not evaluated, last shipped in 1991.

## Imports:

Are wastes received from a foreign source: Yes ☒ No ☐If yes, has notice been filed with EPA: Yes ☐ No ☐: Not evaluated, claim yes.Comments: Last exported Pb Fluoride to Stablex Canada 1991. Also began again to receive Cu etchant (0002) from Canada Macdermid plant 12/92, currently receive ~160 dg/week to be reclaimed.

40 CFR 265.15

INSPECIN SCHEDULE & LOG (DIS)

22a-449(c)-105(a) &amp; 102(b)(2)

Does contact claim inspections are conducted: YesWritten inspection schedule: Yes, appears complete.Inspection log (adequacy of contents: date, time, items inspected, corrective action): Appears complete, several logs utilized, appears to cover all necessary areas.

Documentation:

DailyAll Loading/unloading areas subject to spills (when in use): Yes, logs for a) tanker truck off-load,Tanks Containment, detection, ancillary equip: Yes, well itemized. b) drum receiving.Trtmt Treatment equipment: NAImpd Freeboard level: NAIncin. Combustion/emission control instruments every 15 min.: NAIncin. Inc. & assoc. equipment for leaks/spills/emissions, check alarms & shutdown controls: NAWeeklyCntrainrs Physical condition: Yes for each of 4 dr. storage areas.Cntrainrs Containment system: Yes " " " "Cntrainrs Labels, marking, dates: Yes " " " "Impdmnts Surface impoundments & dikes: NABattery Storage area (no log required): NAOtherAll Safety & emergency equipment: Yes, monthly logs.Tanks Cathodic protection (w/i 6 mos.; then yearly): NA, tanks above-g.Tanks Impressed current (every other month): " " " "LD Monitoring equip (wells, etc.): NA.PCLD Post-closure inspections: NA.Comments (e.g., failure to correct malfunctions/deficiencies/chronic problems): Updated Part B log format to conform to those currently in use. Note: discontinued treatment of NMP ~ 2 yrs. ago but shipped off last dr. NMP waste 2/5/93 per insp. log.

40 CFR 265.16

PERSONNEL TRAINING RECORDS (DPR)

22a-449(c)-105(a)(1)(D)

Training conducted: Yes X No   : however one individual overdue by only ~ one month (corrected, see below)Last annual review (date): 3/24-26/92 New employees: Yes.Written description of training: Yes, detailed.Job title, description & name of employee: YesRecords maintained on-site until closure/3 yrs. for former employees: Yes, signature sheets.Comments (if SQG, describe): Training sessions include Hazmat sessions (by Clean Harbors) for five members of hazmat team 3/24-26/92, includes use of APE + emerg. response; one emerg. coordinator (Ardzijauskas) last trained 1/17/92, was updated on 3/23/93 per correspondence (see file). Also ~ 100 employees received RCRA safety course 1/19/93 by HazMat team Inc., includes Conting. Plan, took exams (filed).

40 CFR 265.50-56/262.34(a)(6) CONTINGENCY PLAN (DCP) 2 49(c)-105(a) & 102(a)Plan on-site Yes X No \_\_\_\_ Date: 10/23/91 revision Prepared by: HRP Assoc.Arrangements with/plan to local authorities: Yes, documented.

(police, fire, hospital, emergency response team)

Emergency procedures (fires, explosions, releases/spills): Yes, itemized, flow charts, reporting, etcEmergency Coordinator(s) name, address, home & office phone: Yes, John Miele, phone + altEmergency equipment list, location, description, capabilities: Yes + table, appears complete.Evacuation plan (signal, primary & alternate routes): Yes + map.

Comments: \_\_\_\_\_

CFR 265.30-37/262.34(a)(4) PREPAREDNESS & PREVENTION (DPP) 22a-449(c)-105(a)&102(a)Immediately accessible to internal communications/alarm system: Yes; intercom, alarm system.Telephone/hand-held two-way radio: Yes; phone, page.Emergency equipment (fire extinguishers/control, spill control, decontamination equip.): Yes;extinguishers primarily ABC; sprinklered.Equipment maintenance: Yes; monthly, in-houseAccess to emergency equipment: OKAdequate aisle space: Yes but stack in racks 4-high, did not inspect 3rd + 4th tiersSource of water in the event of a fire: City hydrants.

Comments: \_\_\_\_\_

40 CFR 265.17 IGNITABLES/REACTIVES/INCOMPATIBLES (DSC) 22a-449(c)-105(a)(1)

Ignitable &amp; reactive wastes separated from sources of ignition or reaction &amp; handled per 265.17: \_\_\_\_\_

Agrees Yes."No smoking" signs (for ignitable & reactive waste): Yes

Comments: \_\_\_\_\_

40 CFR 265.13(b)

W TE ANALYSIS PLAN (DWA)

22a-449(c)-105(a)

Plan on-site: Yes X No \_\_\_\_ Date: \_\_\_\_\_ Prepared by: HRP Assoc.  
 Does plan include: Parameters: Yes, added As; table does not denote Cu but claim test for this via spec. gravity.  
 (including TCLP Test methods: Yes  
 and LDR update) Sampling methods: Yes  
 Frequency: Yes, initial profile + spot test each incoming load.  
 Copy of results on-site: Yes, logged, performed both on-site + via certified private lab.  
 Comments: Incoming loads spot tested for 5 parameters except loads fr/Freight St. MacDermid site, these loads have analytical fr/Freight St. lab as accompaniment. Parameters table now denotes As, however table of spot test parameters does not include As but is performed. LDR revision now covers both incoming + outgoing loads.  
- see also Op. Records pg. 8a

40 CFR 265.73 & 265.94(a)(1) OPERATING RECORDS (DRR)

22a-449(c)-105(a)

Are the following records maintained on-site:

Waste received from off-site: Yes From on-site: Yes  
 Waste description: Yes, per waste type for on-site treatment  
 Waste quantity: Yes  
 Methods of & dates of storage/treatment/disposal: Yes X No \_\_\_\_ though non-RCRA treatment.  
 Waste inventory (including type, volume & location):  
 in storage: Difficult to track, see note pg. 8a, re: drums; OK for tanks.  
 disposed of on-site (recorded on map): NA  
 cross-reference to specific manifest: Yes for incoming loads.  
 Analytical results for:  
 all waste: Yes, appears adequate  
 monitoring wells: Non-RCRA wells in place.  
 trial test (to assure compatibility with tanks, impoundments or waste piles): NE.

Report/summary of any incident requiring implementation of Contingency Plan: YesRecords & results of inspections: YesClosure/Post closure cost estimates: Yes

Comments: See pg. 8a for description of current Operating Records, one concern re: tracking drums, plus do not break down vol of bulk incoming loads split to >1 tank; records may be adequate but difficult to track.

(CONTINUED FROM PAGE 8)

EPA ID number: CTD 001164599 Date of inspection: 2/9/10

Site name: MacDermid, Inc. Town: Waterbury

OPERATING RECORDS (cont.):Tracking + inventory control logs include:

a) each incoming drum gets inspected, sampled (spec. gravity, color + ammonia), if accepted then assign dr. number, record in logbook (entitled "Q.C. Log for Spot Recyclable Materials" - this log also records trans-ship drums + non-recyclables) along w/date received, date treated, spec. gravity, ammonia content, plus attach copy of manifest.

Note: no log maintains running inventory of drums in storage, claim high turnover + treatment rate precludes this, but at Primary Pad ("Big Berm") log of dr. numbers attempts to track via crossing off dr. numbers as pumped into bulk tank for treatment - however is complicated and difficult to follow as numbers not in order. Co. considering computerizing this procedure.

b) incoming bulk loads off-load to storage tanks, recorded in logbook along w/results of spot test, vol. off-loaded (if split to >1 tank, do not separate vols.), manifest #, date + generator.

c) bulk storage tanks (3 waste tanks) inv. log records all inputs + outputs daily, time of transfer;

d) Q.C. log records analytical on incoming solder conditioners, solder stripper + etchant to be treated or trans-shipped; identifies extensive analytical parameters tested for in preparing batches for treatment

e) additional log recording inventory (3 times/day) in three bulk waste tanks. Above-noted log only records incoming bulk loads; this log also records containers into bulk tanks, plus denotes total vols. transferred from bulk tanks

Additional logs noted under inspection program

Waste tank inventory logs denote: tank #1 7189 gal.; tank #2 615 gal. (this morning 6764 gal. transferred out to reclaim processes); tank #3 3311 gal.

Have any regulated units closed: Yes\_\_\_ No X.

If Yes, is closure certified by owner/P.E.: Yes\_\_\_ No\_\_\_

If Yes, date of certification: \_\_\_\_\_ On-file at DEP: Yes\_\_\_ No\_\_\_

Plan on-site: Yes X No\_\_\_ Date: 12/14/92 revision Prepared by: HRP Assoc.

Status of closure plan (approved & date): Not reviewed/approved.

Are all regulated units covered (compare to Part A & on-site operations): Additional areas addressed in closure plan due to combined w/CF-regulated facility closure plan.

Does plan include (indicate presence/absence, comment on adequacy):

Estimate of maximum inventory: Yes: 4 tanks (RCRA) total 29,000 gal, 3 container areas total 82,170 gal,

Description of how each unit will be closed & methods to be used during closure: plus non-RCRA units addressed. Yes, appears detailed.

Description of steps needed to remove/decontaminate equip/structures/soils:

Yes, includes confirmation sampling, decon, etc.

Schedule for closure of each unit & for final closure (time & milestones):

total 360 days.

\* Estimate of expected year of final closure: 2050

Comments (e.g., operations do not match plan, amendments needed): Plan also addresses M&H roll-off at w.w.t.s. (though not RCRA unit) plus non-RCRA recycle tanks (solder stripper reclaim: 4 tanks; Cu etch reclaim: 6 tanks; NMP recycle: 3 tanks - latter unused in years but want to keep permitted on Part B rather than close out)

\* Expected date of closure required only for facilities using trust funds with <20 years of remaining life, & for facilities without approved closure plans).

Plan on-site: Yes\_\_\_ No\_\_\_ Date: \_\_\_\_\_ Prepared by: NA

Status of Post-closure plan (e.g., approved & date): \_\_\_\_\_

Does plan include description & frequency of:

monitoring activities: \_\_\_\_\_

maintenance & inspection activities (e.g., integrity of cap, gwm): \_\_\_\_\_

name, address, telephone no. of post-closure contact: \_\_\_\_\_

length of post-closure period: \_\_\_\_\_

Certification to the Commissioner that notation on deed has been recorded: \_\_\_\_\_

Yes\_\_\_ No\_\_\_

Record sent to the Commissioner of the type, location & quantity of

hazardous waste disposed of in each cell/disposal unit: Yes\_\_\_ No\_\_\_

Comments (e.g., amendments needed, etc.): \_\_\_\_\_

FINANCIAL REQUIREMENTS (D)

40 CFR 265.142

CLOSURE COST ESTIMATE

22a-449-105(a)(1)

Estimate on-site: Yes X No \_\_\_\_ Amount of estimate: \$ 570,962 per 7/7/92  
 Date of most recent adjustment: Note: Freight St. site estimate \$72,671, added  
 Comments: to above (Total \$643,633) covered under one financial test.

40 CFR 265.143

FINANCIAL ASSURANCE FOR CLOSURE

22a-449(c)-105(a)(1)

Type of mechanism (trust fund, surety bond, letter of credit, insurance, financial test/corporate guarantee): Financial Test  
 Amount of coverage: \$ long. net worth \$59,696,000 per 7/7/92  
 Comments: Charles D. Rice, chief fin. officer.

40 CFR 265.144

POST-CLOSURE COST ESTIMATE  
 (disposal facilities only)

22a-449-105(a)(1)

Estimate on-site: Yes \_\_\_\_ No \_\_\_\_ Amount of estimate: \$ \_\_\_\_  
 Date of most recent adjustment: \_\_\_\_  
 Comments: \_\_\_\_

40 CFR 265.145

FINANCIAL ASSURANCE FOR POST-CLOSURE  
 (disposal facilities only)

22a-449-105(a)(1)

Type of mechanism: \_\_\_\_ Amount of coverage: \$ \_\_\_\_  
 Comments: \_\_\_\_

40 CFR 265.147

LIABILITY INSURANCE

22a-449(c)-105(a)(1)

Sudden accidental occurrences (all TSDF's)

Type of mechanism (insurance, financial test/guarantee liability coverage, letter of credit, surety bond, trust fund, combination): Financial Test  
 Amount of coverage: \$ 2 million aggregate  
 If no insurance, date of most recent attempt to obtain: \_\_\_\_

Non-sudden accidental occurrences (impoundments, landfills)

Type of mechanism: \_\_\_\_ Amount of coverage: \$ \_\_\_\_  
 If no insurance, date of most recent attempt to obtain: \_\_\_\_

Comments (e.g., filed Chapter 11, etc.): \_\_\_\_

Does contact claim that physical contact/disturbance of waste would not cause injury/a violation of 40 CFR Part 265/264: Yes    No X.

If No, is there:

24-hr. surveillance system (describe): Yes; all wastes indoors, alarm system.

OR barrier completely surrounding active portion (describe): Site fenced, access gate.

AND Means to control entry (describe): See above

Danger-Unauthorized Personnel Keep Out signs at each entrance to active portion, legible at 25': Yes

Comments:   

Approx. number of satellite storage areas: reportedly  $\approx$  10 (haz. + non-haz.), inspected 9 areas.

Less than 55 gallons (or 1 qt. acutely haz) per waste stream per satellite

accumulation area: Yes per stream

Containers marked & contents described: Yes

Containers closed when not in use: Yes

Comments:   

Number of areas: three > 90 day, one < 90 day, plus MOH roll-off.

Location(s): Warehouse, Pilot Lab, WWT.S.

Impermeable base (type): Concrete Secondary containment\*: Yes

Approx. number & sizes of containers:  $\approx$  725 dr. total (all areas) plus 1 roll-off MOH.

Type(s): steel X poly X fiber X bag/sack    lab pack X roll-off X

Other:   

Management of containers:

Condition (leaks, ruptures, corrosion, heat, pressure): Appear good, did not inspect 3rd + 4th high tiers; 4th tier reportedly empty drums.

Containers closed when not in use: Yes

50 ft. buffer zone for ignitable and reactive waste\*: Yes, all indoors > 50' ft/property line.

Incompatibles separated by dike/wall, etc. Yes, separate storage pads.

Storage less than 90 days (LQG) or 180-270 days (SQG): Yes where necessary, NA elsewhere.

Comments: See pg. 11a for details

\* = Not applicable to Small Quantity Generators

(CONTINUED FROM PAGE 11)

EPA ID number: CTD 001164599 Date of inspection: 2/9, 10, 17 + 22/93

Site name: MacDermid, Inc. Town: WaterburyWASTE CONTAINERS (cont.)

- I. Primary Drum Storage Pad:  $\approx$  610 drums stacked three, possibly four tiers high (4th tier reportedly empty), plus at incoming staging area (adjacent) 54 dr. to be sampled (if accepted then put into storage). Majority D002/D008 alkaline etchant to be treated on-site (reclamation), others to be trans-shipped for treatment or disposal. Oldest dates 11/92.
- Many drums are Hubbard Hall spent etchants; plus currently receive  $\approx$  160 dr./wk from Canada MacDermid of Cu etchant, started receiving 12/92. Appear in good condition, including 3rd tier of rack (though markers not read), no incompatibles.
- At adjacent segregated staging area for incoming to be sampled:  $\approx$  55 dr. D002/D008 alkaline etchant being sampled for acceptance/rejection, all 2/93 dates. Appear OK.
- II. Pilot Lab > 90 day pad: for ignitibles; currently 1 dr. combustible waste oil, non-haz. but marked haz. (vac. pump oil, waste code #362, verified non-haz.).
- III. Pilot Lab < 90 day pad: 18 dr. haz. + non-haz.: 8 dr. Ni solution dated 2/8/93 under analysis (by 2/22 completion were verified non-haz.); 6 dr. D002/D007 chromic acid; 1 dr. D001 filter; 1 dr. (30 gal.) unknown (glass beads w/lig, suspected Cd) dated 10/30/92 hand-marked "Under Analysis" from absolute process (by 3/9/93 MacDermid confirmed it to be non-haz., see correspondence); 1 dr. D006/D007 liq. dated 12/23/92 from Freight St. MacDermid (in CTF0174574) told should receive from off-site into > 90 day RCRA units, drum transferred to proper pad; 1 dr. D002 H<sub>2</sub>SO<sub>4</sub> possibly from Freight St. also (uncertain).
- Note: Freight St. lab wastes received here for off-site shipment preparation, told to receive from off-site into > 90 day RCRA units.
- IV. Solder Stripper Recycle Dept. > 90 day pad: 1 dr. D001 liq. (acetone), actually satellite being filled (start date 5/27/92); process not active since  $\approx$  11/92 due to technical problem noted pg. 3a

At Dry Mix dept. store chemicals past shelf-life, currently:  $\approx$  20 five-gal. cans various corrosives hand-marked "bump" (to w.w.t.s.); mat'ls include NaOH, acids.

At Liq. Blend dept. store partial drums (none full) of leftover product runs, claim use up in < 1 yr. since last year's clean-up of old materials. Note: MacDermid inventories all raw mat'ls every 6 months, excluding the partial drums.

Empty poly drums given to city of Waterbury and others.  
Empty steel drums go to reconditioner.

Packaging: OKLabelling (if applicable, DOT haz.class): Yes where applicable

Marking (Words "Hazardous Waste", generator name &amp; address, manifest doc. no. if being shipped):

Good for those accessed (See comments)Contents described (e.g., chemical name): Yes, see commentsProper DOT shipping name: " " "Accumulation date: " " "

Comments: Due to stacking up to four tiers in racks could not thoroughly inspect 3rd + 4th tiers; appeared in good condition + marked but not accessed closely - contact offered forklift to raise me for inspection, declined.

Tank inventory/description (note above/underground, location, age, construction, ancillary equipment, capacity & waste type): Four tanks, above-g. indoors, store 1003/1004/1008 spent Cu etchant; three tanks 8000 gal, one back-up 5000 gal (claim never used for waste but wish to permit). All hard-piped from truck off-load area; wastes fed into reclaim tanks, latter exempt from RCRA.

Tanks are fabric-reinforced polymer (fiberglass?)Adequate secondary containment for tank & ancillary equip: Yes ☒ No ☐ N/A ☐Comments: Concrete dike; also spill collection sump outside dike, to which is

Describe leak detection system (including ancillary equip.): NA except visual inspection, OK until determine whether or not base (sitting on floor) requires separate detection system.

Describe corrosion protection system: NASpecial requirements for ignitable & reactive waste: Yes ☐ No ☐ N/A ☒Words "Hazardous Waste" and description of contents: YesEvidence of releases/leaks: No ☒ Yes ☐

If yes, describe: \_\_\_\_\_

Was release reported: Yes ☐ No ☐ If yes, date (if known): \_\_\_\_\_Certification of major repairs to tank Yes ☐ No ☐ N/A ☒Any out-of service tanks: Yes ☐ No ☒ If yes, describe: \_\_\_\_\_Comments: Minor ammonia odor in this area, no visible release noted.

Tanks Section continued on next page

Tanks, continued...

Existing Tank Systems (installed before 1/12/87)

Written tank integrity assessment on-site (P.E. certified) Yes\_\_\_ No X N/A\_\_\_.

Does assessment address all required items: Yes\_\_\_ No\_\_\_:

Comments: Tanks installed 1984 + 1985, contacts uncertain re: integrity assessment.

New Tank Systems (installed after 1/12/87)

NA

Written tank design, construction & installation assessment on-site (P.E. certified):

Yes\_\_\_ No\_\_\_ N/A\_\_\_.

Does assessment address all required items: Yes\_\_\_ No\_\_\_:

Documented installation & tightness test on-site: Yes\_\_\_ No\_\_\_

Comments: \_\_\_\_\_

Other comments on tank systems: \_\_\_\_\_

40 CFR 265.220-230

SURFACE IMPOUNDMENTS (DSI)

22a-449(c)-105(a)

(Pits, ponds & lagoons. If closed as a landfill, complete "Landfills" section).

Description (number, approx. dimensions, type of waste, etc): \_\_\_\_\_

Protective cover on dike: \_\_\_\_\_ 2' freeboard: \_\_\_\_\_

Special requirements for ignitable & reactive wastes: \_\_\_\_\_

Evidence of fire, explosion, leak: \_\_\_\_\_

Liners or alternative designs: \_\_\_\_\_

Leachate collection system (for new/expanded impoundments): \_\_\_\_\_

Comments: See pg. 20 re: historical sludge burial + associated non-RCRA g.w. monitoring wells.

40 CFR 265.250-257

WASTE PILES (DWP)

22a-449(c)-105(a)

(if closed as a landfill, complete "Landfills" section instead)

Description (number, approx. size, type of waste, location, etc.):

*Historical, see pg. 20*

Wind erosion control:

Impermeable base:

Run-on/run-off control & prevention:

Special requirements for ignitable & reactive wastes:

Separation of incompatible waste:

Waste analysis:

Evidence of fire, explosion, leak:

Leachate control system:

Comments:

40 CFR 265.301-315

LANDFILLS (DLF)

*MA*

22a-449(c)-105(a)(1)(E)

Description (number, capacity, approx. dimensions, type of waste, monofill, etc.):

Run-on control & run-off collection (treat if necessary):

Wind dispersal control:

Special requirements for ignitable/reactive wastes:

Records of dimensions, contents & locations of each waste type:

Liners & leachate collection systems for new/replacement/lateral expansion units OR alternative design & operating practices:

Maintenance of cap/cover integrity (i.e., protect from erosion, weed plant growth, access by heavy vehicles, etc.):

Maintenance and protection of survey benchmarks:

Comments:

Description of unit(s): NA

What is unit primarily used for (destruction/heat or energy recovery):

Waste analyses performed:

For incinerators: Heating value of waste (BTU):

Halogen content:

Sulfur content:

Lead concentration:

Mercury concentration (maximum allowable):

Continuous/Batch operation:

Start-up & shut down procedures (describe any problems):

Is hazardous waste fed into incinerator/furnace when not at steady state:

Is incinerator certified to burn F020, 21, 22, 23, 26 or F027: Yes\_\_\_ No\_\_\_

Comments (e.g., trial burns, open burning, etc.):

Is hazardous waste recycled on-site: Yes X No\_\_\_

If yes, does the closed loop exemption apply: No

If yes, has a Recycling Registration been filed: Claim yes, 5/8/90.

Approx. number of containers: ≥ 500

Type of material: 2002/2004/2008 spent Cu etchant + solder strippen.

Accumulation date present: Yes

Less than one year storage: Yes

Clearly marked and labelled: Yes

Is documentation available that the material:

- is potentially recyclable & has a feasible means of being recycled: Yes X No\_\_\_:

- all recycled within one year of accumulation dates: Yes X No\_\_\_:

Comments:

Are any recyclable materials used in a manner constituting disposal: NA

If yes, explain: \_\_\_\_\_

Comments: \_\_\_\_\_

40 CFR 261.1(c)(6) &amp; 261.6(a)(3)

Scrap Metals

NA

22a-449(c)-101(a) &amp; (c)

Does the facility generate, accept, store, treat, or dispose of any waste scrap metals which are ignitable or reactive: Yes\_\_\_ No\_\_\_

If yes, are the materials being handled as hazardous wastes: Yes\_\_\_ No\_\_\_

Comments: \_\_\_\_\_

40 CFR 266, Subpart G

Spent Lead Acid Batteries  
Being Reclaimed

22a-449(c)-106(a) &amp; (c)

Storage and Handling:

Batteries open or closed: \_\_\_\_\_

Evidence of leaks, ruptures, spills or poor handling procedures: \_\_\_\_\_

Separation from incompatibles: \_\_\_\_\_

Stored on impermeable surface: \_\_\_\_\_

Accumulation over 20,000 kg: Yes\_\_\_ No\_\_\_

If yes, has a Recycling Registration been filed? Yes\_\_\_ No\_\_\_

Treatment:

Are batteries cracked or processed on-site: \_\_\_\_\_

Do they have a permit for this activity: \_\_\_\_\_

Comments: \_\_\_\_\_

Note: persons who generate, transport, store or collect spent lead-acid batteries other than for recycling must comply with sections 100-110 inclusive.

40 CFR 266, Subpart D

Hazardous waste fuel

22a-449(c)-106(a)

(continued on next page)

Does the facility market hazardous waste fuel: Yes\_\_\_ No\_\_\_

If yes, have they notified of this activity: \_\_\_\_\_

Do they have burner certifications for all customers on site: (40 CFR 266.34(e)) \_\_\_\_\_

Does the facility burn hazardous waste fuel: Yes\_\_\_ No\_\_\_

If yes, have they notified of this activity: \_\_\_\_\_

Is the HW fuel burned in a unit meeting the boiler spec: \_\_\_\_\_

Have they submitted a burner certification, and are copies on-site: \_\_\_\_\_

List destination facilities: \_\_\_\_\_

Comments: \_\_\_\_\_

40 CFR 266, Subpart E Used oil burned for energy recovery  
(Note: listed hazardous waste oil must be treated as hazardous waste.)

22a-449(c)-106(a)&(b)

Does the facility generate X; market   ; or burn    used oil.

If yes, is it: On-spec X Off-spec ?

If the facility collects or markets used oil:

Have they notified for this activity: NA

Do they have a written waste analysis plan: \_\_\_\_\_

Are shipments of off-spec fuel oil properly invoiced and retained for 3 years: \_\_\_\_\_

Are analytical records kept for 3 years: \_\_\_\_\_

Does the facility market off-spec oil: \_\_\_\_\_

If yes, do they have burner certifications for all customers: [40 CFR 266.43(b)(5)]

If the facility burns used oil: NA

Is it off-spec: Yes    No   

If yes:

Has the facility sent burner certifications to all its marketers: \_\_\_\_\_

Are invoices and analyses for shipments of off-spec oil kept for 3 years: \_\_\_\_\_

Is the oil burned in a unit meeting the boiler spec: \_\_\_\_\_

Comments: \_\_\_\_\_

40 CFR 266, Subpart F Precious Metal Recovery

NA

22a-449(c)-106(a)

Does the facility generate   ; treat   ; store   ; or dispose    of precious metals recyclables: \_\_\_\_\_

May generate small vol. precious metals from recovery/reclamation processes

If yes, are all shipments manifested: \_\_\_\_\_

If yes, is precious metal(s) identified on manifest: \_\_\_\_\_

Are inventories maintained: Yes    No   

Are all wastes recycled within one year of accumulation dates: Yes    No   

Is material potentially recyclable: Yes    No   

Does the material have a means of being recycled: Yes    No   

Is it economically feasible to recycle it: \_\_\_\_\_

Comments: \_\_\_\_\_

40 CFR 263

HAZARDOUS WASTE TRANSPORTATION<sup>3</sup> (TOR)

22a-449(c)-11 &amp; 103

Is this handler involved in waste transportation: Yes ☒ No \_\_\_\_ (If No, skip the rest of this section).

Kinds of waste transported: RCRA ☒ CT Regulated ☒

Manifest records retained on-site: Yes ☒ No \_\_\_\_

Comments on manifests: \_\_\_\_\_

Are hazardous wastes transported in generator's own vehicles, less than 1000 kg/mo of his own waste: Yes \_\_\_\_ No ☒

If NO:

Current State of CT Transporter Permit Yes ☒ (Permit No. CTHW-330 ) No \_\_\_\_ *see comments*

Any vehicle numbers on-site at the time of inspection: Yes ☒ No \_\_\_\_ *two noted.*

If YES, permit Number displayed on waste-carrying portion of vehicle (rear and sides, at contrasting color, at least 10 cm. high): Yes ☒ No \_\_\_\_

Personnel trained in emergency response: Yes

Wastes stored on-site: Yes ☒ No \_\_\_\_

If YES, is waste stored on vehicles for <72 hours: Yes \_\_\_\_ No \_\_\_\_ *NA*

Comments (e.g., compliance with other permit conditions, etc.): \_\_\_\_\_

Permit expired 1992 but re-application filed timely + appropriate so allowed to transport until re-issued.

See attachment for list of permitted vehicles.

<sup>3</sup> Completion of this portion of the RCRA checklist does not constitute a complete evaluation of compliance with transporter permit conditions.

<sup>4</sup> If yes, a permit is required per PA 91-313.

PHOTOS TAKEN

(number, location, brief description or attach photocopy of log)

NONE

SAMPLES TAKEN

(number, type)

NONE

COMMENTS ON OTHER AREAS OF ENVIRONMENTAL CONCERN (AIR, WATER, WASTE)

Noted throughout appropriate sections of report + pg 20.

EXIT MEETING

Meeting conducted: Yes ☒ No ☐

List attenders and titles: C. Gillis, J. Miele + another.

(CONTINUED FROM PAGE     )EPA ID number: CTD 001164599 Date of inspection: 2/9, 10, 17 + 22/93Site name: MacDermid, Inc. Town: Waterbury.HISTORICAL DISPOSAL + G.W. MONITORING:

Total three pre-RCRA MOH surface impoundments located near current spent etchant truck off-load terminal, excavated early 1980's (date uncertain per contacts) and stored as waste pile across street from main plant entrance (on soil) until 1982 when  $\approx$  28 dump truck loads were shipped for disposal to Archer landfill, Shelton (claim manifested as haz. waste). Residual MOH reportedly buried at area of former waste pile, located between base of hill + current parking lot, area asphalted over.

In mid-1980's consultant IPC, Westport installed 7 g.w. monitoring wells, supposedly contacted DEP on matter (claiming pre-RCRA though dates not verified, sludge shipped 1982), submitted reports to DEP, never received any reply. Wells non-RCRA, installed voluntarily. No installation data available, depths uncertain, monitored only sporadically. Latest results were hand-written only, typed per my request for copies, attached.

One well dry, no longer monitored. Have four active (and one dry) wells indoors at area of former impoundments, identified as 1) near Cu oxide press, 2) near ammonia tank, 3) near liquids off Cu oxide press, and 4) tanker garage - this one supposedly in or very near former impoundments; other 3 reportedly downgradient + adjacent. Dry well actually at outdoor sump. Outdoors across street near former waste pile are two wells, one upgradient + one downgradient.

Four active wells around impoundments last analyzed 10/1/92, two wells across street around waste pile last analyzed 10/88. Most heavily contaminated wells are those downgradient of impoundment: at Cu oxide press well 248 mg/l Cu, 5.2 mg/l Cr, 4.1 mg/l Ni; at ammonia tank well 350 mg/l Cu, 6.4 mg/l Cr, and 1.7 mg/l.

See attachment: uncertain of last utilized. Note: 1) no upgradient well established, 2) other metals (eg. Ba, Pb, Cd) plus organics not analyzed per contact.

All results in mg/L

Indoors		Indoors	dry, not tested ↓ Outdoor Sump*	Indoors	Near and
Cu Oxide Press		Ammonia Tank		near Cu oxide press	atop old lagoons
				Liquids	Tanker Garage
Cu	248	350	----	82	0.1
Ni	4.1	1.7	----	1.5	0.1
Cr	5.2	6.4	----	0.4	0.1

\*Dry

most recent test

↓

Capped Sludge (Oct, 1988)

Outdoors, across st., where sludge staged after removal from lagoons.

	Upstream	Downstream
Fe	0.1	0.5
Cu	0.1	0.1
Cr	0.1	0.1
Sn	2	2
Ni	0.1	0.1
Zn	0.1	0.1
F	6.2	----

Wells installed approx. mid-1980's, by IPC, Westport.

Uncertain of depths, installation procedures.

Above are the only parameters tested for;

Total 3 lagoons.

All currently permitted for haz. waste transportation, all garaged on-site.  
 Obtained during 2/10/83 inspection. PH.

12/7/89

VEHICLE OR VESSEL IDENTIFICATION

	UNIT NUMBER	YEAR	MAKE	VEHICLE ID#	REGIST #	STATE	CAPACITY
O X	42-2118 **	1989	Fruehauf	1H2V04023KB034401	V7844	CT	80 x 55
O X	42-2119 **	1989	Fruehauf	1H2V04025KB034402	V7843	CT	80 x 55
O X	42-2120	1989	Fruehauf	1H2V04027KB034403	V7845	CT	80 x 55
O X	42-2121 ✓	1989	Fruefauf	1H2V04029KB034404	V7846	CT	80 x 55
	42-2122	1989	Fruefauf	1H2V04020KB034405	V7847	CT	80 x 55
	42-2123	1989	Fruefauf	1H2V04022KB034406	V7848	CT	80 x 55
	42-2124	1989	Fruefauf	1H2V04024KB034407	V7849	CT	80 x 55

O N.Y.

\*\* LICENSED MICHIGAN TRAILER

X Licensed Wisconsin Trailer + Himer

	T-1*	1971	Acro	3731	69804	CT	4500 Gals
	T-2*	1975	Heil	H36710	74633	CT	4750 Gals
O	T-3*	1984	Fruehauf	IH4T04024EK018601	S8092	CT	5000 Gals
	T-6	1974	Heil	925770	S9908	CT	6000 Gals

\*REAR LOADERS

O N.Y.

393102	Kurt Roger	1988	Intl	2HSFEADRXJC013317	5903A	CT
393103	Eric	1988	Intl	2HSFEADRIJC013318	5904A	CT
426386	Ted	1990	Intl	2HSFEADR9LC035862	46937A	CT
426385	Kurt Fred	1990	Intl	IHSHGGURXLH245658	2698A	CT

	Color	Domicile
Tractors ---- Owned By - Ryder Truck Rental	Red/White	MacDermid Inc.
Leased By - MacDermid Inc.		Waterbury, Ct.
Trailers ----	White/FRP	
Tankers T3 Owned By - Eagle Leasing	Stainless Steel	
Leased By - MacDermid Inc.		
T1 T2 T6 Owned by - MacDermid Inc.	T1 White	
	T2 Gray SS	
	T6 SS	

T-3 } insulated  
 T-6 } tankers